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## A NEW SPECIES OF THE GENUS *VELARIFICTORUS* RANDELL, 1964 (ORTHOPTERA: GRYLLIDAE) FROM YUNNAN, CHINA

Dong-Xiao Zhang, Hao-Yu Liu\*, Fu-Ming Shi\*

The Key Laboratory of Zoological Systematics and Application, College of Life Sciences, Hebei University, Baoding 071002, Hebei Province, China. \*Co-corresponding authors, E-mail: liuhy@aliyun.com, shif\_m@126.com

**Summary.** *Velarifictorus (Velarifictorus) bannaensis* sp. n. is described from Yunnan province, China. New species is most similar to *V. flavifrons* Chopard, 1966 and *V. ornatus* (Shiraki, 1911), but differs from both species by the shape of male genitalia.

**Key words:** Gryllidae, Gryllinae, *Velarifictorus*, taxonomy, new species, China.

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**Резюме.** Из провинции Юньнань в Китае описан *Velarifictorus (Velarifictorus) bannaensis* sp. n. Новый вид сходен с *V. flavifrons* Chopard, 1966 и *V. ornatus* (Shiraki, 1911), но отличается от них формой гениталий самца.

## INTRODUCTION

The genus *Velarifictorus* Randell, 1964 is the larger genus in Gryllinae. Up to now, it comprises 3 subgenera (*Velarifictorus* Randell, 1964, *Pseudocoiblemmus* Gorochov, 2001 and *Buangina* Otte et Alexander, 1983), including 101 species and subspecies (Cigliano *et al.*, 2017). The subgenus *Velarifictorus* is the largest in the genus *Velarifictorus*, and mostly distributed in Australia, Africa and Asia (Cigliano *et al.*, 2017). In Asia, six species of this subgenus are recorded from Japan (Ichikawa *et al.*, 2000; Ichikawa *et al.*, 2006), thirteen species from India (Chopard, 1969; Vasanth, 1993), nine species from Vietnam (Kim & Hong, 2014), and also three species from Korea (Storozhenko *et al.*, 2015). There are eleven species and subspecies of the subgenus *Velarifictorus* distributed in China (Yin & Liu, 1995; Wang *et al.*, 1998; Xie, 2004; Cigliano *et al.*, 2017): *V. (V.) aspersus* (Walker, 1869), *V. (V.) beybienkoi* Gorochov, 1985, *V. (V.) flavifrons* Chopard, 1966, *V. (V.) hemelytrus* (Saussure, 1877), *V. (V.) curvinervis* Xie, 2004, *V. (V.) khasiensis* Vasanth et Ghosh, 1975, *V. (V.) micado* (Saussure, 1877), *V. (V.) ornatus ornatus* (Shiraki, 1911), *V. (V.) ornatus caudatus* (Shiraki, 1930), *V. (V.) parvus* (Chopard, 1928), and *V. (V.) ryukyuensis* Oshiro, 1990. A new species of the subgenus *Velarifictorus* is discovered in Yunnan province of China and described in this paper. The holotype of a new species is deposited in the Museum of Hebei University, Baoding, China (MHBU).

## DESCRIPTION OF A NEW SPECIES

*Velarifictorus (Velarifictorus) bannaensis* Zhang, Liu et Shi, sp. n.  
Figs 1–6

MATERIAL. Holotype – ♂, China: Yunnan province, Xishuangbanna, Mengla, 19.V 2015, coll. Ping Wang (MHBG).

DESCRIPTION. MALE. Body medium size for subgenus (Fig. 1). Occiput somewhat convex, frontal rostrum wide, about width about 2.5 times as long as width of antennal scape; Antennal scape peltate. Eyes medium, oval; lateral ocelli small and rounded, located at basal of frontal rostrum, median ocellus large and oval, located at midpoint of frontal rostrum top. Median of clypeofrontal sulcus protruding downward. Apical joint of maxillary palpi longer than the third, about 1.3 times, knife-like and slightly widened. Apical joint of labial palpi longer than second, club-shaped, about 1.2 times. Pronotum obviously transverse, about 1.5 times as long as wide, both sides of the parallel, anterior margin straight, posterior margins somewhat convex midway; lateral lobes longer than high, lower margin slightly straight. Tegmen reaching 9th abdominal tergite, with 2 oblique veins, mirror diamond, about 1.25 times as long as wide, divided by an irregular vein; apical field rather long, with irregular veins; equal length in mirror. Fore tibiae with large and ovoid outer tympana, small and rounded inner tympana in proximal; hind tibiae armed with 6 inner and 7 outer spines; apical portion of tibia with 6 spurs. Hind femur stout, about 3 times as long as maximal width.

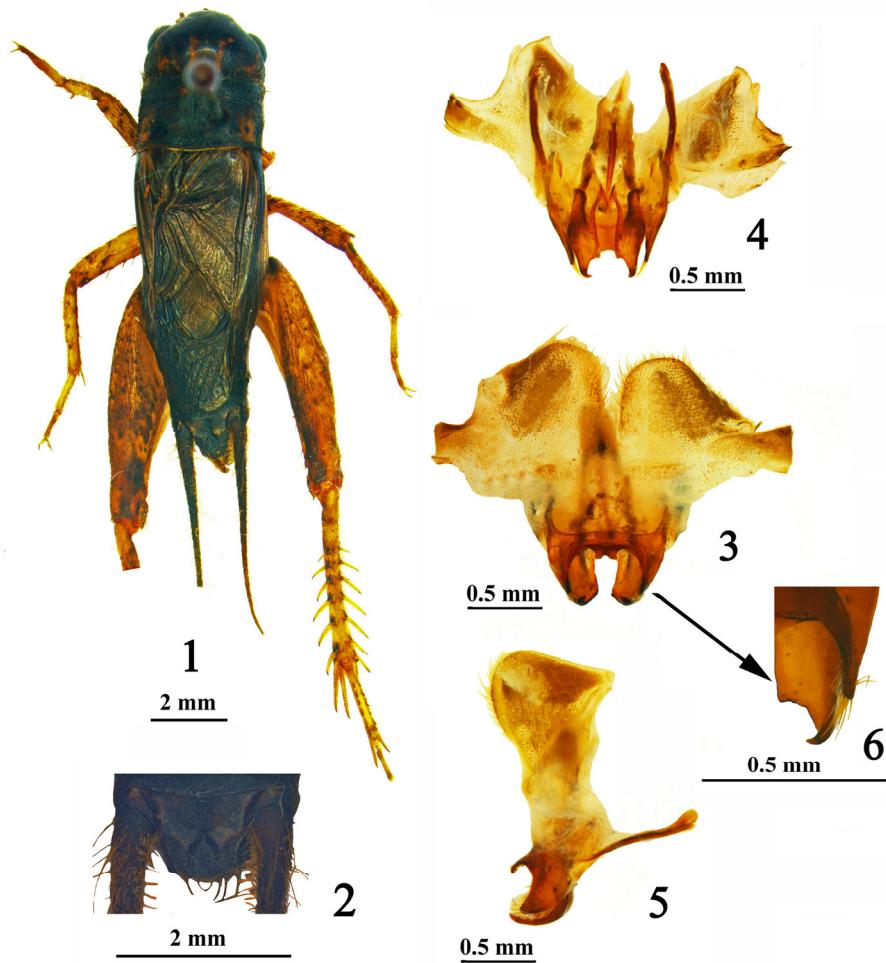
Supra anal plate widened at base (Fig. 2), narrowed apically, posterior margin rounded, both sides of central area convex. Subgenital plate coniform, narrowing apically, apical area arc-like. Genitalia (Figs. 3–6): epiphallus distinctly transverse, with short middle lobes, middle lobes with a small notch; median of basal margin epiphallus convex; lateral lobes respectively with a bunch of hair; ectoparameres longer than lateral lobes of epiphallus; apex of ectoparameres distinctly curved inward.

COLORATION. Body yellowish-brown. Head dark brown, with 4 distinctly yellow lines on occiput; ocelli yellow; vertex black colored with fine ecdysis ‘Y’ yellow line. Pronotum blackish-brown with some light yellow spots. Tegmina dark brown. Legs yellowish-brown, with dark brown spots.

FEMALE. Unknown.

MEASUREMENTS (mm). Length of male body: 16.0, pronotum: 3.0, tegmina: 10.0, hind femur: 9.8.

DIAGNOSIS. The new species is similar to *Velarifictorus (Velarifictorus) flavifrons*, but differs from the latter by lateral lobes of genitalia with a bunch of hair, by convex median of basal margin epiphallus, by ectoparameres rather short and its apex distinctly curved inward. In *V. (V.) flavifrons*, the lateral lobes of genitalia without a bunch of hair; median of anterior margin of epiphallus concave; ectoparameres long and its apex slightly curved inward. The new species is also similar to *V. (V.) ornatus*, but in latter species the clypeofrontal sulcus flat near the middle, the median of basal margin of epiphallus depressed, and the apical field of tegmen rather short. *Velarifictorus (V.) bannaensis* sp. n. is similar to *V. (V.) minoculus* Ingrisch, 1998 from Thailand, but in latter species the mirror with a straight vein and epiphallus with a rather broad middle lobes, while in new species the mirror with a wave vein and the middle lobes of apiphallus very small. From *V. (V.) rectus* Ingrisch, 1998 (known from Thailand) the new species differs from the former by the shape of clypeofrontal sulcus (in *V. rectus* the clypeofrontal sulcus protruding upwards).



Figs. 1–2. *Velarifictorus (Velarifictorus) bannaensis* sp. n., male. 1 – body, dorsal view, 2 – supra anal plate, dorsal view; 3 – male genitalia, dorsal view, 4 – the same, ventral view, 5 – the same, lateral view, 6 – apex of ectoparameres.

DISTRIBUTION. China (Yunnan).

ETYMOLOGY. The name of new species is derived from the type locality on Banna (Xishuangbanna for short).

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Address: Federal Scientific Center of the East Asia Terrestrial Biodiversity (former Institute of Biology and Soil Science), Far East Branch of the Russian Academy of Sciences, 690022, Vladivostok-22, Russia.

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